	Application No.	Applicant(s)
Office Action Summary	09/450,308	MAUDLIN, STUART C.
	Examiner	Art Unit
7	Kimberly B Eaton	2161
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day, will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
1)⊠ Responsive to communication(s) filed on <u>07 J</u>	ulv 2000	
	2b)⊠ This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Disposition of Claims		
4)⊠ Claim(s) <u>1-44</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-44</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examiner		
10) The drawing(s) filed on is/are: a) accep	•	
Applicant may not request that any objection to the		
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f)
a) All b) Some * c) None of:	, , , , , , , , , , , , , , , , , , ,	, (=) =, (-).
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
Copies of the certified copies of the priori application from the International Bur See the attached detailed Office action for a list of the certified action for a list of the certi	ity documents have been receive eau (PCT Rule 17.2(a)).	d in this National Stage
_	•	
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received.		
15) Acknowledgment is made of a claim for domestic	• •	
Attachment(s)		
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) datent Application (PTO-152)

Art Unit: 2161

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claim1 is rejected under 35 U.S.C. 102(a) as being anticipated by Ausubel et al (Vickrey Auctions with Reserve Pricing, June 28, 1999).
- 3. In re claim 1 Ausubel et al. shows a method of optimizing a Vickrey auction transaction to maximize revenue and profit to the seller, by withholding supply based on a market-derived reserve price calculated from buyer's bids (page 1, paragraph 1).
- 4. Claim 39 is rejected under 35 U.S.C. 102(a) as being anticipated by Ausubel (US Patent No. 6,026,383, herein referred to as '383).
- 5. In re claim 39 the '383 patent shows a method of using a computer system and a communications network for facilitating a transaction between at least one seller and at least one buyer, including the steps of: submitting a sales offer for items to be sold (column 6, lines 15-17); submitting at least one price bid from at least one buyer (column 6, lines 63-65); determining form the submitted bids a sales price to reach the maximum profit (column 7, lines 25-45); and selling items to the buyers offered a bid

Art Unit: 2161

price which is equal or higher than the determined sales price, wherein the items are

sold to said buyers for the same sales price (column 7, lines 40-43).

Claim Rejections - 35 USC § 103

- 6. Claims 2-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausubel et al. as applied to claim 1 above, and further in view of Ausubel (US Patent No. 6,026,383, herein referred to as '383).
- 7. In re claim 2 Ausubel et al. demonstrates the economic theory of Vickery auctions with reserve pricing, including recording auction parameters and calculating an optimum selling price; announcing the auction and collecting bids; sorting receiving bids; processing bids to determine the optimum selling price; selecting the winning bids (Ausubel, page 5, section 3).
- 8. However, because Ausubel et al. is a theoretical research paper it does not show a physical system for carrying out a Vickrey auction with reserve pricing.
- 9. Examples of on-line, automated auctions are prevalent in the art as noted by the applicant (page 6, line 14). The '383 patent shows, in figures 1-4 and related text) the steps of: establishing a system for recording auction parameters and calculating a selling price and a communications network for announcing the auction and collecting bids (column 2, lines 61-67); sorting receiving bids (column 9, lines 57-59); processing bids to determine the selling price (Fig. 2b and related text); selecting the winning bids and notifying bidders of whether they won or lost based upon the calculated optimum selling price (column 7, lines 15-17).

Art Unit: 2161

- 10. It would have been obvious to one of skill in the art at the time of the invention to use the automated auction system of '383 to implement the theoretical auction of Ausubel et al. because the automated auction system allows the auction to be conducted swiftly even if the bidders are not located on-site ('383, column 3, lines 33-35).
- 11. In re claim 3 the '383 patent shows, in figures 1-4 and related text, the item being offered (column 6, lines 15-17); whether at market bids (high bid) will be accepted (column 9, lines 12-13 & 37-37); whether there is an announced reserve price, and if so, what it is; whether there is an unannounced reserve price, and if so, what it is (column 9, lines 13-13); whether bids should have a minimum quantity, and if so, what it is; whether bids should have a maximum quantity and if so what it is (column 9, lines 20-21); whether to announce the quantity available for sale (column 6, lines 15-17); the procedure for submitting bids, whether bids may withdrawn prior to the close of the auction, and the procedure for withdrawing bids (column 6, lines 60-62; column 7, lines 8-12); delivery requirements (column 6, lines 3-5) wherein one of skill in the art will appreciate that it is well known in the art of on-line purchasing to include buyer delivery information with buyer identifying information; the closing date and time of the auction (column 6, lines 52-53).
- 12. In re claim 4 the '383 patent shows, in figures 1-4 and related text, announcing the selected auction parameters (column 6, lines 15-27; collecting and recording bids containing (column 6, lines 63-65); the identity of the bidder (column 6, lines 63-65); quantity bid for (column 7, line 1) pricing information (column 6, line 63); and whether

Art Unit: 2161

bidder will accept partial quantity, according to the procedures selected and announced (column 8, lines 5-7); rejecting nonconforming bids and noting any bid withdrawals (column 7, lines 8-12).

- 13. In re claim 5 the '383 patent shows, in figures 1-4 and related text, the step of sorting and consolidating all at market bids and all price bids other than those less than the reserve price, wherein the price bids are ranked in descending order (column 9, lines 57-59).
- 14. In re claim 6 the '383 patent shows, in figures 1-4 and related text, announcing the selected auction parameters (column 6, lines 15-27; collecting and recording bids containing (column 6, lines 63-65): the identity of the bidder (column 6, lines 63-65); quantity bid for (column 7, line 1) pricing information (column 6, line 63); and whether bidder will accept partial quantity, according to the procedures selected and announced (column 8, lines 5-7); rejecting nonconforming bids and noting any bid withdrawals (column 7, lines 8-12).
- 15. In re claim 7 the '383 patent shows, in figures 1-4 and related text, the step of sorting and consolidating all at market bids and all price bids other than those less than the reserve price, wherein the price bids are ranked in descending order (column 9, lines 57-59).
- 16. In re claim 8 the '383 patent shows, in figures 1-4 and related text, the step of sorting and consolidating all at market bids and all price bids other than those less than the reserve price, wherein the price bids are ranked in descending order (column 9, lines 57-59).

Art Unit: 2161

- 17. In re claim 9 the '383 patent shows, in figures 1-4 and related text, the step of sorting and consolidating all at market bids and all price bids other than those less than the reserve price, wherein the price bids are ranked in descending order (column 9, lines 57-59).
- 18. In re claim 10 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).
- 19. In re claim 11 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).
- 20. In re claim 12 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next

Art Unit: 2161

highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).

- 21. In re claim 13 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).
- 22. In re claim 14 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).
- 23. In re claim 15 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling

Art Unit: 2161

price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).

- 24. Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).
- 25. In re claim 17 Ausubel et al. shows processing bids to determine the selling price including the steps of: calculating a starting revenue by multiplying the highest price bid times the number of items wanted; calculating a comparative revenue by multiplying the next highest price bid times the number of items wanted by both the highest and next highest bidders; determining from the calculated revenue figures the optimum selling price and number is units to be sold to realize the maximum revenue (section 3, pages 5-8).
- 26. In re claim 18 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations.
- 27. In re claim 19 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

Art Unit: 2161

28. In re claim 20 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

- 29. In re claim 21 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 30. In re claim 22 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 31. In re claim 23 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 32. In re claim 24 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 33. In re claim 25 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of

Art Unit: 2161

determining a cost function to be included in subsequent calculations (section 3, page 5).

- 34. In re claim 26 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 35. In re claim 27 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 36. In re claim 28 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 37. In re claim 29 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 38. In re claim 30 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

Art Unit: 2161

39. In re claim 31 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

- 40. In re claim 32 Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).
- 41. In re claim 33 the '383 patent shows, in figures 1-4 and related text, the step of comparing the total number of items available to that required to supply all bidders that bid at or above the optimum selling price to determine if there are additional items available for sale, and if so processing bids made at market (column 9, lines 37-48).
- 42. In re claim 34 the '383 patent shows, in figures 1-4 and related text, the step of comparing the total number of items available to that required to supply all bidders that bid at or above the optimum selling price to determine if there are additional items available for sale, and if so processing bids made at market (column 9, lines 37-48).
- 43. In re claim 35 the '383 patent shows, in figures 1-4 and related text, the step of comparing the total number of items available to that required to supply all bidders that bid at or above the optimum selling price to determine if there are additional items available for sale, and if so processing bids made at market (column 9, lines 37-48).
- 44. In re claim 36 the '383 patent shows, in figures 1-4 and related text, the step of processing at market bids to determine if there are sufficient items available to supply all

the at market demand, and if not, further comprising the step of applying the selected prorationing scheme (column 7, lines 40-46).

- 45. In re claim 37 the '383 patent shows, in figures 1-4 and related text, the step of processing at market bids to determine if there are sufficient items available to supply all the at market demand, and if not, further comprising the step of applying the selected prorationing scheme (column 7, lines 40-46).
- 46. In re claim 38 the '383 patent shows, in figures 1-4 and related text, the step of processing at market bids to determine if there are sufficient items available to supply all the at market demand, and if not, further comprising the step of applying the selected prorationing scheme (column 7, lines 40-46).
- 47. Claims 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausubel (US Patent No. 6,026,383, referred to as '383) as applied to claim 39 above, and further in view of Ausubel et al.
- 48. In re claim 40 the '383 patent shows, in figures 1-4 and related text, sorting the submitted bids from high to low based on the respective bid prices (column 9, lines 57-59); generating a sequence of cumulated bid quantities (column 9, lines 41-43);
- 49. The '383 patent fails to explicitly show multiplying each element of said sequence of cumulated bid quantities and the respective bid amount to generate to sequence of bid revenues; and selecting the highest revenue from the sequence to determine the respective bid price as the sales price.
- 50. Ausubel et al. shows, in an analogous art related to Vickrey auctions with reserve pricing, multiplying each element of said sequence of cumulated bid quantities and the

Art Unit: 2161

respective bid amount to generate to sequence of bid revenues; and selecting the highest revenue from the sequence to determine the respective bid price as the sales price (section 3, pages 5-8).

- 51. It would have been obvious to one of skill in the art at the time of the invention to include the method of maximizing revenue of Ausubel et al. into the auction of the '383 patent because traditional Vickrey auctions, as implemented in the '383 patent, suffer from small revenues in cases where competition is weak (Ausubel, page 2, paragraph 1).
- 52. In re claim 41 the '383 patent shows, in figures 1-4 and related text, at market bids are accepted, comprising the step of comparing the total number of items available to that required to supply all bidders that bid at or above the optimum selling price to determine if there are additional items available for sale, and if so processing bids made at market (column 7, lines 35-46
- 53. In re claim 42 Ausubel et al. shows determining a cost profile and including the cost profile in the calculation to generate a sequence of bid profits; selecting the highest profit to determine the sales price (section 3, pages 5-8).
- 54. In re claim 43 Ausubel et al. shows determining a cost profile and including the cost profile in the calculation to generate a sequence of bid profits; selecting the highest profit to determine the sales price (section 3, pages 5-8).
- 55. In re claim 44 the '383 patent shows, in figures 1-4 and related text, shows determining a prorationing scheme (column 7, lines 40-46); processing at market bids to determine if there are sufficient items available to supply all the at market demand, and

Art Unit: 2161

if not, further comprising the step of applying the selected prorationing scheme (column 7, lines 40-46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly B Eaton whose telephone number is 703-305-3229. The examiner can normally be reached Monday through Friday from 8:00 am – 6:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703-305-9768.

The Fax phone number for the UNOFFICIAL FAX for the organization where this application or proceeding is assigned is (703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

The Fax phone number for the OFFICIAL FAX for the organization where this application or proceeding is assigned is (703) 746-7239 (for formal communications intended for entry).

The Fax phone number for AFTER-FINAL communications where this application or proceeding is assigned in (703) 746-7238.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Art Unit: 2161

JAMES P. TRAMMELL SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100